

Nord-Lock Wheel nuts

USER MANUAL

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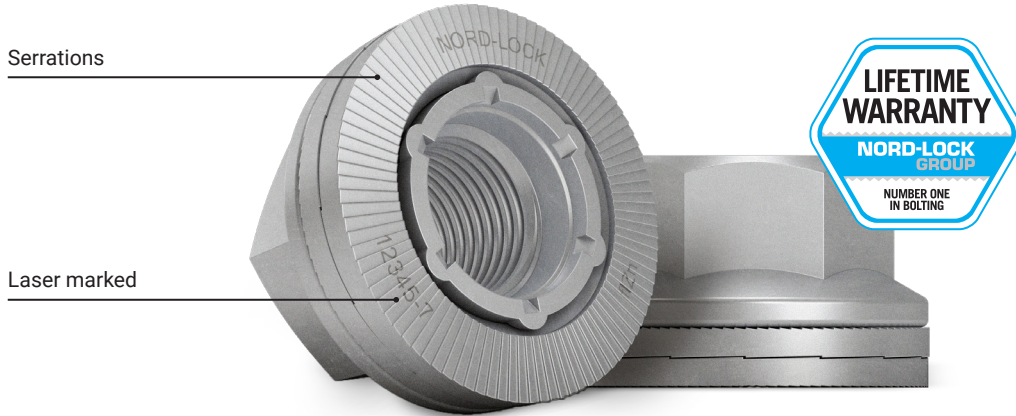
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Prevents wheels from loosening



Safe wheel save lives

Nord-Lock wheel nuts safely secure wheels on commercial vehicles by maintaining a high clamp force, even under extreme operating conditions. They represent a simple and cost-effective way to make wheels safe and secure for more productive and efficient operations. Every box of Nord-Lock wheel nuts has a control number. Using the unique control number, every batch can be traced from the material certificate of the steel, through the entire production process to the finished product.

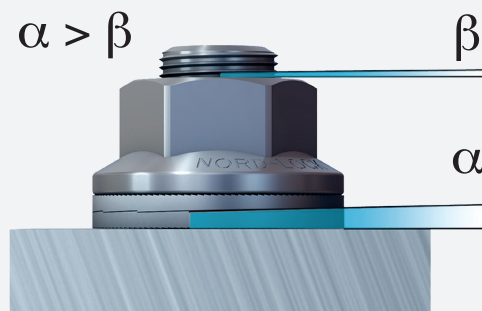
Applications

Nord-Lock wheel nuts are designed for flat-faced steel rims. Each nut is permanently attached to a pair of Nord-Lock wedge-locking washers. The wheel nut is suitable for:

- Heavy on-road vehicles (buses, trucks, trailers, etc.)
- Off-road vehicles (tractors, farming equipment, mining equipment, forestry machinery, military vehicles, etc.)

How it works

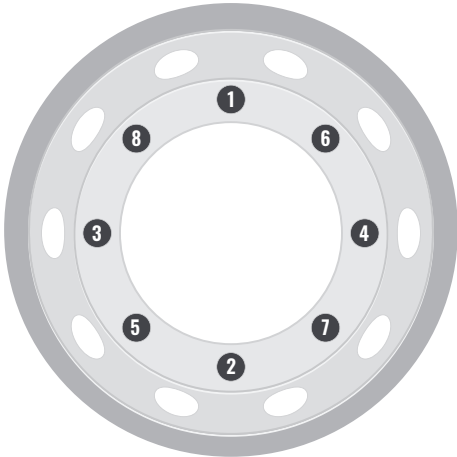
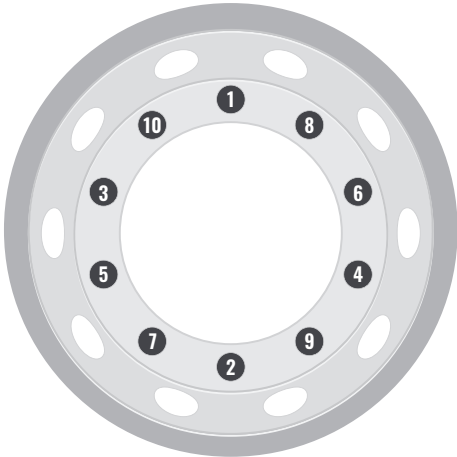
When the Nord-Lock wheel nut is tightened, the serrations on the washers are embedded into the mating surfaces, allowing movement only across the cam faces. Any rotation of the wheel nut is prevented by the wedge-effect of the cams.



Assembly Instructions

For flat-faced rims

Nord-Lock wheel nuts are designed for use on flat-faced rims. Sliding always occurs between the nut and the upper washer during tightening, and between the cam faces during untightening. In this way, clear impression marks are created without scoring the contact surface. Upon reuse, the serrations find their way back into the previously created impressions.



1. Place the rim over the wheel hub. Ensure the wheel studs are not damaged.

2. Before tightening make sure the contact surface is free from dirt or gravel to not compromise the grip of the serrations. Fit and tighten the nuts with a calibrated torque wrench at the recommended torque, in the sequences illustrated here.

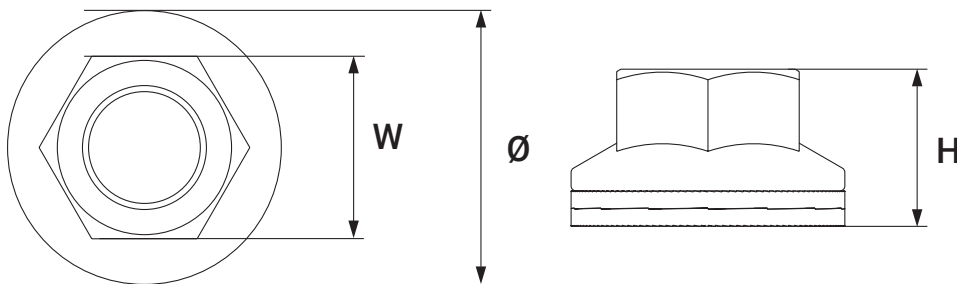
FAQ

Do I need any special tools to tighten Nord-Lock wheel nuts?	No, Nord-Lock wheel nuts are developed to fit standard equipment and tools.
Do I need to re-tighten Nord-Lock wheel nuts?	Yes. It is common practice to retighten Nord-Lock wheel nuts. Nord-Lock wheel nuts do not lose clamp load due to rotation. However, settlements occur in other parts of the wheel assembly during driving, which may result in loss of clamp load. Nord-Lock therefore recommends that standard retightening procedures are maintained.
Should the Nord-Lock wheel nuts be lubricated?	Nord-Lock wheel nuts are pre-lubricated with a dry film lubricant or lubricating paste to facilitate assembly. During reuse it is recommended to re-lubricate the threads as well as under the flange.
Do I need to change all wheel nuts to Nord-Lock wheel nuts?	Yes, in order to maintain the clamp load in the entire wheel assembly, Nord-Lock wheel nuts must be fitted to all wheel studs.

Material Guide

Coating	Corrosion resistance	Lubrication	Property class
Base coat: Delta Protekt® KL100 zinc flake coating Top coat: VH 302 GZ	Minimum 600 hours in salt spray test (according to ISO 9227)	Dry film lubricant/ lubricating paste	Class 10

Technical Data



Thread	Product designation	Width W	Ø	Height H	Tightening torque		Clamp load	
		[mm]	[mm]	[mm]	[Nm]	[ftlb]	[kN]	[lb]
M16x1.5	NLWN M16	24,0	34,5	23,0	280	205	~100	~22,500
M18x1.5	NLWN M18	27,0	40,0	24,0	400	295	~130	~29,200
M20x1.5	NLWN M20	30,0	45,0	26,0	550	405	~160	~36,000
M22x1.5	NLWN M22	32,0	46,0	27,0	650	480	~180	~40,500
7/8"-11 BSF	NLWN 7/8"-11	32,0	46,0	27,0	650	480	~170	~38,200
M24x1.5	NLWN M24	36,0	48,0	33,0	950	700	~240	~54,000